



**U.S. Department of the Interior
Office of Inspector General**

AUDIT REPORT

**INSPECTION AND ENFORCEMENT PROGRAM
AND SELECTED RELATED ACTIVITIES,
BUREAU OF LAND MANAGEMENT**

**REPORT NO. 96-I-1267
SEPTEMBER 1996**



United States Department of the Interior

OFFICE OF INSPECTOR GENERAL

Washington, D.C. 20240

OCT 21 1996

MEMORANDUM

TO:

The Secretary

FROM:

Wilma A. Lewis
Inspector General

SUBJECT SUMMARY: Final Audit Report for Your Information - "Inspection and Enforcement Program and Selected Related Activities, Bureau of Land Management" (No. 96-I-1267)

Attached for your information is a copy of the subject final audit report. The objective of the audit was to determine whether the Bureau of Land Management's inspection and enforcement program was in compliance with inspection provisions of the Federal Oil and Gas Royalty Management Act and whether inactive wells were properly classified and plugged and their bonding sufficient to protect the Government's interests.

The Bureau generally complied with the requirement of the Act that all Federal and Indian oil and gas leases that had significant production or a history of regulatory noncompliance (as defined by the Bureau) should be inspected annually. However, improvements are needed in the strategy for targeting leases for inspection, in oversight of the conduct of inspections, in the classification and/or approval of inactive oil and gas wells, and in the procedures for bonding wells. Specifically, we found that a significant number of inspections were performed on leases that had minimal or no production, inspections were performed that were incomplete or inadequate, and some required inspection items had not been inspected for at least 5 years. In addition, none of the seven field offices we reviewed had properly classified and/or approved inactive wells, the Bureau's minimum bond requirements were not sufficient to cover the Government in case of operator default, and the Bureau routinely approved lease assignments without considering bond adequacy.

The Bureau's proposed corrective actions for our recommendations relating to the Inspection and Enforcement Program and inactive wells were sufficient for us to consider all of our recommendations resolved.

If you have any questions concerning this matter, please contact me at (202) 208-5745 or Mr. Robert J. Williams, Acting Assistant Inspector General for Audits, at (202) 208-4252.

Attachment



United States Department of the Interior

OFFICE OF INSPECTOR GENERAL

Washington, D.C. 20240

SEP 30 1996

Memorandum

To: Assistant Secretary for Land and Minerals Management

From: Robert J. Williams *Robert J. Williams*
Acting Assistant Inspector General for Audits

Subject: Audit Report on the Inspection and Enforcement Program and Selected Related Activities, Bureau of Land Management (No. 96-I-1267)

This report presents the results of our audit of the Bureau of Land Management's Inspection and Enforcement Program and selected related activities. This audit is part of the Office of Inspector General's biennial review of the Federal Royalty Management System for fiscal years 1994 and 1995. The objective of this review was to determine whether the Bureau's Inspection and Enforcement Program and selected related activities: (1) were in compliance with inspection provisions of the Federal Oil and Gas Royalty Management Act and (2) ensured that inactive wells were properly classified and plugged and that bonding was sufficient to protect the Government in case a lease operator defaulted.

Our audit disclosed that, while the Bureau complied with the requirement of the Federal Oil and Gas Royalty Management Act for inspecting annually all Federal and Indian oil and gas leases that had significant production or a history of regulatory noncompliance (as defined by the Bureau), improvements were needed to more effectively accomplish Program objectives. Specifically, we found that:

- The Bureau inspected leases which had little or no production; over one-half of the production inspections reviewed were deficient in scope and quality; and five of the seven offices reviewed did not perform all inspections in a timely manner. These deficiencies occurred because the Program's strategy required excess numbers of labor-intensive, detailed production accountability inspections, which limited the ability of Bureau field offices to utilize resources efficiently and effectively, and five of the seven field offices reviewed had not adequately implemented the strategy. In addition, the Bureau did not provide effective Program oversight and training. Consequently, the Inspection and Enforcement Program did not adequately ensure production accountability for oil and gas

produced or regulatory compliance for well-drilling and well-plugging and for abandonment operations on Federal and Indian leases.

- None of the seven Bureau field offices reviewed had properly classified and/or approved inactive oil and gas wells. In addition, the Bureau's minimum bond requirements were often not sufficient to protect the Government in case a lease operator defaulted, and the Bureau routinely approved lease assignments without considering bond adequacy. These deficiencies occurred because Bureau field offices did not follow established procedures or meet existing time frames for reviewing inactive wells and because the Bureau had not raised inadequate bond minimums and individual bonds that were known to be insufficient. Consequently, since fiscal year 1991, the Government has plugged 131 orphan wells, at a cost of about \$1.6 million, and is currently liable for plugging over 300 additional orphan wells, at a cost estimated to exceed \$3 million. In addition to the cost, orphan wells may contaminate groundwater and other resources.

Our audit also disclosed that to improve cost effectiveness, the Bureau needs to coordinate with the Minerals Management Service regarding the type and significance of potential operator referral errors.

Based on the June 7, 1996, response (Appendix 8) to the draft report from the Director, Bureau of Land Management, we consider the five recommendations relating to the inspection and enforcement program and the six recommendations relating to inactive wells resolved but not implemented. Accordingly, the unimplemented recommendations will be referred to the Assistant Secretary - Policy Management and Budget for tracking of implementation, and no further response to the Office of Inspector General is required (see Appendix 9).

The legislation, as amended, creating the Office of Inspector General requires semiannual reporting to the Congress of all audit reports issued, the monetary impact of audit findings (Appendix 1), actions taken to implement audit recommendations, and identification of each significant recommendation on which corrective action has not been taken.

We appreciate the assistance of Bureau personnel in the conduct of our audit.

cc: Director, Bureau of Land Management

CONTENTS

	Page
INTRODUCTION	1
BACKGROUND	1
OBJECTIVE AND SCOPE	2
PRIOR REPORTS	3
FINDINGS AND RECOMMENDATIONS	6
A. INSPECTION AND ENFORCEMENT PROGRAM	6
B. INACTIVE WELLS	13
OTHER MATTERS	18
APPENDICES	
1. CLASSIFICATION OF MONETARY AMOUNTS	19
2. BUREAU OF LAND MANAGEMENT OFFICES VISITED OR CONTACTED DURING AUDIT	20
3. DETAILED PRODUCTION ACCOUNTABILITY INSPECTIONS PERFORMED ON LOW- PRODUCING INSPECTION ITEMS DURING FISCAL YEAR 1994	21
4. PERFORMANCE OF REQUIRED HIGH PRIORITY DRILLING AND PLUGGING AND ABANDONMENT INSPECTIONS DURING FISCAL YEAR 1994	22
5. OIL AND GAS PRODUCTION ACCOUNTABILITY PILOT	23
6. INCOMPLETE OR INADEQUATE PRODUCTION INSPECTIONS PERFORMED DURING FISCAL YEAR 1994 AND FIRST QUARTER OF FISCAL YEAR 1995	25
7. IMPLEMENTATION OF WELL STATUS REVIEW DURING FISCAL YEAR 1995..	26
8. BUREAU OF LAND MANAGEMENT RESPONSE TO DRAFT REPORT	27
9. STATUS OF AUDIT REPORT RECOMMENDATIONS	32

INTRODUCTION

BACKGROUND

The Federal Oil and Gas Royalty Management Act of 1982, in part, and the Mineral Leasing Act of 1920, as amended, require the Secretary of the Department of the Interior to: (1) provide a system for inspecting oil and gas leases, including annual inspections for each lease site that produces or is expected to produce significant quantities of oil or gas or whose operations have a history of noncompliance with applicable provisions of the law or regulations; (2) provide training for inspectors in methods and techniques of inspection; and (3) develop guidelines that specify the coverage and frequency of inspections. Provisions of the Acts as they relate to Federal onshore and Indian leases are the responsibility of the Bureau of Land Management as implemented by the Code of Federal Regulations (43 CFR 3160) and the Onshore Oil and Gas Orders published in the “Federal Register.” The Minerals Management Service is responsible for monitoring lease production on the Outer Continental Shelf and for other requirements under the Federal Oil and Gas Royalty Management Act of 1982. In addition to production inspections mandated by the Federal Oil and Gas Royalty Management Act, the Bureau conducts drilling, abandonment, and other inspections authorized by regulations under the Mineral Leasing Acts.

The Bureau’s Inspection and Enforcement Program evolved under various operating and inspecting strategies. In 1993, the Bureau of Land Management issued an interim manual/handbook detailing its latest Inspection and Enforcement Program strategy. The handbook established annual requirements for the number and type of production inspections; prescribed the requirements and procedures for verifying reported production and for reviewing operators’ drilling and plugging and abandonment practices; and provided guidelines for inspection staffing, program oversight, and inspector training. The handbook identified two types of production inspections: (1) a detailed production accountability inspection that requires a review of all production-related activities, including production records, and (2) an independent measurement/handling inspection that focuses on a specific component of production accountability (for example, tank gauging). A detailed production accountability inspection takes an average of 24 staff hours to complete, and an independent measurement/handling inspection takes about 6 staff hours to complete.

The Bureau assigns inspection items¹ a high or low inspection priority depending on production, regulatory compliance history, and other factors such as environmental or health and safety concerns and legal requirements. The Bureau estimates that it has 20,400 inspection items nationwide. Inspection items that produce or are expected to produce significant quantities of oil or gas (an average of 12,000 barrels of oil or 120,000

¹An inspection item may consist of a single lease or a group of leases under a unit or communitization agreement and include from 1 to over 100 wells and related facilities.

mcf² of gas per month) or that have a history of noncompliance (six minor or two major violations within a 2-year period) are classified as high priority and are required by the Bureau to be inspected annually. The Bureau estimates that about 1,100 of its 20,400 inspection items nationwide are classified as high priority. Inspection items that are not in the high priority category are classified as low priority and are required by the Bureau to be inspected every 3 years. The Bureau estimates that about 19,300 of its 20,400 inspection items nationwide are classified as low priority. Either detailed production accountability inspections or independent measurement/handling inspections can be used to meet the mandated high or low priority inspection requirements.

For fiscal years 1994 and 1995, the Bureau strategy required field offices to conduct: (1) detailed production accountability inspections annually on 17 percent of the total inspection items that had produced in the previous 12 months and (2) independent measurement/handling inspections on 36 percent of the remaining 83 percent of producing inspection items. In addition, the Bureau assigns either a high or a low priority inspection classification to drilling and plugging operations based on the risk of substantial adverse impacts of the operations to the public health and safety or to the environment. For fiscal years 1994 and 1995, the Bureau required field offices to inspect 30 percent of all drilling operations and 25 percent of all plugging operations provided that all high priority drilling and plugging operations were inspected.

The Bureau's Inspection and Enforcement Program budget was approximately \$12.6 million in fiscal year 1994, which, in part, funded 218 full-time equivalent positions at 51 of the Bureau's 232 field offices. The Bureau is responsible for Program duties on more than 20,400 Federal onshore and Indian inspection items consisting of nearly 78,000 total wells and 43,000 facilities. The Bureau's inspectors enforce the regulatory requirements for well-drilling, oil and gas production, and well-plugging and abandonment operations on Federal onshore and Indian oil and gas leases, which in 1994 paid \$635 million in royalties. During fiscal year 1994, Bureau inspectors identified underreported production totaling more than 218,000 barrels of oil and 11.5 million mcf of gas; issued more than 7,600 notices of incidents of noncompliance for regulatory violations; and issued more than \$96,000 in assessments or civil penalties on incidents of noncompliance.

Inspection-related data are recorded in the Automated Inspection Record System. This system is used to track inspections. In this regard, the System's data base identifies the names and locations of inspection items, the numbers and dates of inspections, incidents of noncompliance, assessments, average monthly production, and inspection priority classifications.

OBJECTIVE AND SCOPE

The objective of this audit was to determine whether the Bureau's Inspection and Enforcement Program: (1) was in compliance with inspection provisions of the Federal Oil and Gas Royalty Management Act and (2) ensured that inactive wells were properly

²Mcf is one thousand cubic feet, the standard unit for measuring the volume of natural gas.

classified and plugged and that bonding was sufficient to protect the Government in case a lease operator defaulted.

Our review included visits to the following Bureau offices: two state offices, four district offices, five resource area offices, and one inspection section office (Appendix 2). At 7 of the 12 field offices, we reviewed Bureau inspection reports and associated supporting documentation, Monthly Reports of Operations (Form 3160-6), and various types of approval documents and sundry (miscellaneous) notices. These seven offices were responsible for about 9,200 (45 percent) of the Bureau's 20,400 inspection items nationwide.

Our audit was made in accordance with the "Government Auditing Standards," issued by the Comptroller General of the United States. Accordingly, our audit included such tests of records and other auditing procedures that were considered necessary under the circumstances to accomplish the audit objective. As part of our audit, we evaluated the system of internal controls to the extent we considered necessary. The internal control weaknesses identified are discussed in the Findings and Recommendations section of this report. If implemented, the recommendations should improve the internal controls.

We reviewed the Department of the Interior Annual Statement and Report, required by the Federal Managers' Financial Integrity Act, for fiscal year 1994 to determine whether any reported weaknesses were within the objective and scope of our review. We determined that the reported weakness of the Bureau of Land Management to effectively inspect and enforce production accountability for onshore fluid minerals was directly related to our review. Accordingly, we evaluated the Bureau's corrective actions as necessary. The results of this evaluation are discussed in Findings A and B in this report.

PRIOR REPORTS

The General Accounting Office and the Office of Inspector General have each issued one audit report in the past 6 years related to the Bureau's Inspection and Enforcement Program as follows:

- In June 1990, the General Accounting Office issued the report titled "Shortcomings in Onshore Federal Oil and Gas Production Verification" (No. GAO/RCED-90-99). The report concluded that the Bureau's Inspection and Enforcement Program was not ensuring that oil and gas producers were accurately reporting oil and gas production, Program oversight was inadequate, and the Bureau's Automated Inspection Record System was providing unreliable information. The report made nine recommendations, all of which were subsequently resolved.

- In March 1992, the Office of Inspector General issued a followup report (No. 92-I-578) to the Office of Inspector General report titled "Inspection and Enforcement Program and Selected Related Activities, Bureau of Land Management" (No. 90-18), issued in November 1989. The followup report contained five recommendations for correcting weaknesses related to: (1) reporting the status of the prior report's recommendations; (2)

implementing review criteria for gas venting and flaring; (3) using oil and gas program funds; (4) notifying the Secretary of the Interior that the revised Inspection and Enforcement strategy for fiscal year 1991 had not been fully implemented; and (5) allocating needed resources and support to accomplish Program objectives. Based on the Bureau's responses, we considered all five recommendations resolved and implemented.

Since the issuance of the above audits, the Bureau has conducted at least two studies and issued two reports and an action plan as follows:

- In response to a finding in our 1989 audit report regarding the potential liability to the Government for plugging oil and gas wells that the operators did not bond sufficiently, the Bureau conducted its own study and issued a report in November 1990 titled "Potential Government Liability for Plugging Oil and Gas Wells." The study, which the Bureau designed to statistically quantify conditions identified in the 1989 audit report, resulted in the following projected conclusions: (1) between 16,344 (24 percent) and 32,688 (48 percent) of the Bureau's recorded 68,100 usable wells were misclassified; (2) 4,422 (67 percent) of the Bureau's recorded 6,600 temporarily abandoned wells³ did not have valid approvals for temporary abandonment; (3) 2,970 (45 percent) of the Bureau's recorded 6,600 temporarily abandoned wells required plugging; (4) 2,128 (16 percent) of the Bureau's recorded 13,300 shut-in wells⁴ required plugging; and (5) the Government was at least partially liable for plugging as many as 582 orphan wells,⁵ at a cost of up to \$4.8 million.

- In March 1992, the Bureau issued an action plan (Instruction Memorandum 92-149) to address Government liability associated with the costs of plugging inactive wells. The plan included action to: (1) review all inactive wells to determine the accuracy of the reported status of the wells; (2) obtain justification from the operators for wells in shut-in or temporarily abandoned status; (3) require operators of unjustified shut-in and unapproved temporarily abandoned wells either to return the wells to production or to submit notices of intent to plug and abandon the wells; and (4) determine the adequacy of existing bond coverage based on the number and condition of unplugged wells, the operators' financial resources, the operators' histories of noncompliance, and notices of uncollected royalties issued by the Minerals Management Service. The action plan also established steps to identify and to establish priorities for plugging orphan wells with Bureau funds. The action plan was scheduled for completion by October 1, 1994, and was to be followed by an ongoing review of inactive wells. However, as discussed in Findings A and B in this report, the effort has not been completed.

³Temporarily abandoned wells are wells that have been determined to be no longer capable of production and that are held for future use,

⁴Shut-in wells are wells from which the lease operator has temporarily stopped producing oil and gas because of economic or other considerations but for which production maybe restarted by opening a valve or turning on a switch.

⁵Orphan wells are wells that do not have sufficient or existing bonding or other available resources to cover required plugging and abandonment costs.

- In March 1995, a Bureau Issue Resolution Team issued the report titled “Bonding and Unfunded Liability Review,” which made 13 recommendations regarding improvements needed in the Bureau’s management of inactive wells and its bonding program. The recommendations included steps to increase bonding, to continue actions instituted in Instruction Memorandum 92-149, and to further reduce potential Government liability associated with the costs of plugging inactive wells. The report made two recommendations regarding bonding: (1) increase minimums from \$10,000 to \$20,000 on individual bonds and from \$25,000 to \$75,000 on statewide bonds and (2) require operators of approved temporarily abandoned wells to plug the wells after 2 years and to either increase the bond by \$2 per foot of well depth or pay an annual \$100 fee for each temporarily abandoned well into a Bureauwide fund to plug wells. In addition, the report recommended that the potential liability of at-risk lease assignments (sales) be reassessed before the assignments are approved by the Bureau. At the time of our review, the Bureau said that it was planning to review lease assignments for bond adequacy but was not intending to implement increased minimum bonds or to initiate a well-plugging fund.

FINDINGS AND RECOMMENDATIONS

A. INSPECTION AND ENFORCEMENT PROGRAM

The Bureau of Land Management generally complied with the Federal Oil and Gas Royalty Management Act requirement for inspecting annually all Federal and Indian oil and gas leases that had significant production or a history of regulatory noncompliance (as defined by the Bureau). However, improvements were needed in the operation of the Inspection and Enforcement Program at five of the seven offices we reviewed. Specifically, we found that the Bureau inspected operations that had little or no production and that some of its inspections were not comprehensive, adequately documented, or timely. These conditions occurred because Bureau field office management believed that the Bureau's inspection strategy required the field offices to dedicate limited staff to low priority inspections. In addition, the Bureau did not sufficiently manage the Program to provide adequate instructions on conducting inspections to field offices, to adequately oversee the Program to ensure that inspections were conducted in accordance with the requirements, and to provide employees sufficient training on inspection procedures. As a result, the Inspection and Enforcement Program did not adequately ensure production accountability for oil and gas produced or regulatory compliance for well-drilling and well-plugging and abandonment operations on Federal and Indian leases.

Inspection and Enforcement Strategy

The Inspection and Enforcement Program strategy did not provide for a proper mix of detailed production accountability inspections and independent measurement/handling inspections necessary to ensure overall production accountability and compliance with the regulatory requirements for well drilling, oil and gas production, and well plugging and abandonment. The strategy required an excess number of labor-intensive, detailed production accountability inspections on 17 percent of the total inspection items that had produced in the last 12 months and independent measurement/handling inspections on 36 percent of the remaining 83 percent of the inspection items. The strategy prescribed these inspection levels without regard to the level of production; without considering the results from previous inspections; and without considering local conditions at field offices, such as weather, topography, and resources.

Production Levels. The Bureau has not established a production level below which detailed inspections would not need to be conducted. We believe that detailed production accountability inspections should not routinely be performed on inspection items that are below established minimum production levels except when independent measurement/handling inspections or other conditions indicate that the inspections are warranted. For illustrative purposes, we established a minimum dollar threshold of \$2,000, which, during fiscal year 1994, represented production of 1,000 barrels of oil per month, 10,000 mcf of gas per month, or any combination of the two with the same aggregate dollar value. We believe that royalties of \$2,000 per month or more are

significant enough to justify the conduct of detailed production accountability inspections. We discussed the production levels with Bureau personnel, who agreed that the levels were reasonable for purposes of our review,

Based on our definition, we found that Bureauwide in fiscal year 1994, 61 percent (908 of 1,482) of the detailed production accountability inspections (averaging 24 staff hours per inspection) were performed on inspection items that were below the minimum production levels (Appendix 3) and that in 46 of the 1,482 cases, the Bureau performed detailed production accountability inspections on inspection items that had no production. Performing detailed inspections on low-producing inspection items disclosed only minor underpayments of royalties. For example, the Platte River Resource Area Office conducted 21 detailed production accountability inspections on inspection items that were below minimum production and identified underreported gas production of only \$24 in estimated royalty value. Also, the White River Resource Area Office conducted 56 detailed production accountability inspections on inspection items that were below minimum production and identified underreported gas production of only \$896 in estimated royalty value. We believe that production accountability could have been adequately ensured with the less labor-intensive, independent measurement/handling inspections, which require an average of only 6 staff hours each to complete.

Results of Previous Inspections. During fiscal years 1992 and 1993, the Farmington District Office witnessed meter calibration tests on over 500 gas meters and found no significant discrepancies in the meters. However, in fiscal year 1994, the District Office continued to witness meter calibrations as a part of detailed production accountability inspections that, as in the prior 2 years, disclosed no significant discrepancies. We believe that the number of meter calibration tests witnessed could have been reduced in 1994 based on the results of the 1992 and 1993 testing.

Local Conditions. The Bureau's Program strategy did not consider local conditions at field offices, such as weather, topography, and resources, which can adversely impact the abilities of inspectors to conduct inspections as follows: (1) at field offices with severe winter climates that reduced the time available to do site inspections, such as in North Dakota and Wyoming, inspectors were required to perform the same percentage of detailed production accountability inspections as inspectors in more moderate climates, such as in New Mexico; (2) at offices such as the Farmington District, topography, such as arroyos and canyons, required inspectors to sometimes drive 50 miles between wells and related facilities on one inspection item; and (3) at the White River Resource Area Office in fiscal year 1994, four inspectors conducted the Office's required 64 detailed production accountability inspections (a ratio of 1:16) as compared with the Lea County Inspection Section Office, where only four inspectors conducted its 164 required detailed production accountability inspections (a ratio of 1:41).

We believe that staff conducting lower priority production inspections should have been conducting higher priority inspections, such as inspections of well-drilling operations. These higher priority inspections were not performed because well-drilling and well-plugging activities take place outside normal working hours and some of the field

managers did not authorize overtime to inspect these activities. The Bureau's strategy emphasizes the inspection of drilling and plugging operations, which the Bureau has designated as high priorities because these operations pose a high risk of substantial adverse impact to public health and safety and the environment. However, in fiscal year 1994, five of the seven field offices reviewed did not perform 39 percent (463 of 1,177) of the Bureau strategy's high priority drilling and plugging and abandonment inspections (Appendix 4). For example, the Carlsbad Resource Area Office inspectors did not perform inspections of 110 of the 183 high priority well-drilling operations. Instead, during this same period, these inspectors performed about 100 labor-intensive, detailed production accountability inspections on inspection items that had low production levels, which resulted in the detection of misreported production with a royalty value of only about \$1,500.

Program Management

Despite some improvements in production verification, further management actions are needed to develop detailed procedures for conducting production inspections, to ensure compliance with existing procedures through effective oversight, to provide adequate training to inspectors, and to maintain an accurate Automated Inspection Records System.

Management Improvements. We found that the Bureau had made progress in developing general procedures for reviews of production records. For example, in October 1993, the Bureau issued Instruction Memorandum 94-17, "Establishment of Interim Manual and Handbook Guidance for the Oil and Gas Inspection and Enforcement Strategy," which required reviews of production records on all detailed production accountability inspections. Many independent measurement/handling inspections included limited record reviews, which we believe significantly improved the effectiveness of these inspections. In fiscal year 1994, Bureau field offices reported that reviews of production records were performed in over 5,600 of the approximately 9,200 production inspections completed. Other progress made in the Program included the Bureau's obtaining an additional \$5.7 million in annual funding since fiscal year 1990 and an additional 54 full-time positions. At the time of our review, the Bureau was replacing its Automated Inspection Record System with a more comprehensive system that should enable management to monitor inspection activities.

Procedures for Production Record Reviews. The Bureau's procedures for reviews of production records did not require an adequate number of production months to be tested. In that regard, we found that, even though the inspection items may not have been inspected for over 5 years, six of the seven field offices visited generally reviewed no more than 3 recent months of Monthly Reports of Operations; 1 year of the Monthly Reports of Operations Averaging Report; and only 1 to 3 recent months of production records, such as run tickets, gas charts, and valve seal data. Also, the Bureau's procedures for verifying the accuracy of reported production were insufficient. Specifically, the Bureau did not have: (1) examples of typical reporting deficiencies and anomalies that should be checked; (2) steps that should be followed when analyzing operator records; (3) materiality thresholds on when to expand a review because of errors

detected; and (4) steps that should be followed to resolve reporting errors. The seventh field office, the Farmington District Office, had developed and implemented detailed review procedures for production records as the result of its fiscal year 1993 Oil and Gas Production Accountability Pilot (Appendix 5). We believe that these procedures have merit and should be considered by the Bureau when it develops review procedures nationwide for detailed production records.

Compliance With Procedures. Production inspections conducted in fiscal year 1994 and the first quarter of fiscal year 1995 were not performed in compliance with inspection procedures outlined in the strategy. Specifically, our review of official inspection reports and supporting documentation for 118 inspections at the seven field offices visited disclosed the following:

- **Inadequate or Incomplete Inspections.** The enforcement strategy handbook requires verification of site security, reviews of valve seals and records, current facility diagrams, and documentation supporting these inspection activities. However, 65 (55 percent) of the 118 inspections were either incomplete or inadequate (Appendix 6). For example, at the Carlsbad Resource Area Office, 15 of the 20 inspections reviewed were incomplete and/or performed inadequately. Specifically, for 12 inspections, either there was no documentation of site-security verification, such as identification of facility valve seals and review of valve seal data, or files contained facility diagrams that were inaccurate. Also, for six inspections, there was no documentation, such as reports of witnessing meter calibration tests, to ensure that production measurement systems were being calibrated properly. In addition, production record reviews had not been completed on 11 inspections, and these inspections therefore did not ensure that field production was reported properly.

- **Inspections Not Performed.** At the seven field offices reviewed, approximately 700 (8 percent) of the more than 9,200 inspection items had not been inspected for at least 5 years. The Bureau's inspection strategy requires an inspection of all producing items once every 3 years. At the Farmington District Office, 503 producing inspection items in the 3,632 active inspection item universe had not been inspected for at least 5 years, even though 30 of the 503 items produced over 1,000 barrels of oil or 10,000 mcf of gas per month.

Production inspections were not completed in accordance with the inspection strategy and were not completed timely because field supervisors did not provide sufficient oversight to detect noncompliance. Although the Bureau required annual supervisory reviews of inspectors' work, we found that these reviews generally were not performed. For example, at the Carlsbad Resource Area Office, the supervisor said that the inspectors' work was not reviewed because the inspectors were all certified and experienced and he believed the required reviews were not necessary. Bureau inspectors at several locations also cited insufficient training as a reason for not performing production inspections. Specifically, the inspectors said that the approximately 4 hours of training on how to review production records included in the Bureau's 2-week Oil and Gas Orientation

Course did not provide the inspectors with the skills needed to perform reviews of production records.

Recommendations

We recommend that the Director, Bureau of Land Management:

1. Reevaluate and revise the Inspection and Enforcement strategy to use Inspection and Enforcement Program resources more effectively and efficiently. Specifically, field offices should determine the mix of detailed production accountability inspections and independent measurement/handling inspections to be performed based on the offices' Program needs and priorities.
2. Establish a minimum production level threshold below which detailed production accountability inspections are not required unless warranted by documented conditions.
3. Use existing Inspection and Enforcement Program resources to ensure that all high priority well-drilling and well-plugging operations are inspected.
4. Develop detailed procedures for inspectors to use in reviewing production records and provide training necessary to implement these procedures. These procedures should specify the minimum number of monthly production records to be reviewed both for standard production reviews and for reporting anomalies that are detected.
5. Develop requirements to ensure that the results of the inspections and the independent supervisory or peer reviews are recorded and documented.

Bureau of Land Management Response and Office of Inspector General Reply

In the June 7, 1996, response from the Director, Bureau of Land Management (Appendix 8), to the draft report, the Bureau concurred with Recommendations 1-5. Based on the response, we consider all the recommendations resolved but not implemented (see Appendix 9).

Additional Comments

Regarding the performance of inspections, the Bureau said that it did "not concur with the statement [in our report] that the Bureau's field office management believed that the inspection strategy required field offices to dedicate limited staff to low priority drilling/abandonment vs. production inspections." The Bureau also said that the strategy document "is very clear that high priority drilling and abandonment inspections are to take precedence over production inspections."

However, in our report, we actually stated:

We found that the Bureau inspected operations that had little or no production and that some of its inspections were not comprehensive, adequately documented, or timely. These conditions occurred because Bureau field office management believed that the Bureau's inspection strategy required the field offices to dedicate limited staff to low priority inspections.

As such, we did not state or intend to imply that the Bureau's inspection strategy directed field offices to perform low priority drilling/abandonment inspections instead of production inspections. Our point was that field offices planned individual production inspections primarily to accomplish numeric goals and did not consider production levels. As a result, many inspections were performed on low priority (low production) leases, and many high priority inspections were not performed. For example, in fiscal year 1994, 49 percent (246 of 500) of the high priority drilling inspections and 32 percent (217 of 677) of the high priority plugging and abandonment inspections were not performed. Further, the Bureau, in responding to Recommendations 1 and 2, stated that the Oil and Gas I&E (Inspection and Enforcement) Policy/Guidance Team proposed changes to eliminate percentage requirements when conducting inspections.

Regarding production accountability, the Bureau disagreed that "production accountability could have been adequately ensured with the less labor-intensive independent measurement/handling inspections." The Bureau stated, "The current independent measurement/handling inspection process will not provide the level of production accountability to meet the intent of the inspection strategy. "

Again, our statement was based on the fact that the Bureau was conducting detailed production accountability inspections on leases that had minimal or no production. In situations where there is minimal or no production, we believe that the less labor-intensive measurement/handling inspection should provide adequate inspection coverage. As noted in our report, 908 (61 percent) of 1,482 detailed production accountability inspections were conducted on leases that had minimal production, including 46 production inspections of leases that had no production. When there is a valid reason for performing a labor-intensive inspection, such as reported incidents of noncompliance or production/royalty reporting deficiencies, a detailed inspection could be justified. However, when the cost of conducting a detailed production verification inspection is considerably more than the anticipated benefit to be derived from performing the inspection, we believe that an independent measurement/handling inspection should be used.

Although the Bureau expressed disagreement with our statement regarding the use of the less detailed inspection procedures for low-producing wells, the Bureau apparently agrees that detailed inspections of marginal wells are unnecessary. Indeed, in responding to Recommendations 1 and 2, the Bureau stated, "A national minimum production level threshold would eliminate unnecessary inspection of marginal wells. " If the current independent measurement/handling inspection process is insufficient to adequately ensure accountability for even the low-producing wells, the process should be modified. In this regard, the Bureau reported that its Oil and Gas I&E Policy/Guidance Team has proposed changes to enhance the requirements of the independent measurement/handling inspections.

Regarding the consideration of field office conditions, such as weather, topography, and resources, in formulating inspection strategy, the Bureau did not agree with the statement in our report that its inspection strategy did not consider these factors.

We found that the field offices established inspection goals to accomplish a specified number of inspections so as to meet the percentages in the Bureau's strategy (17 percent of all inspection items in the field office were required to have detailed production verification inspections, and 36 percent of the remaining inspection items were required to have independent measurement/handling inspections). These inspection requirements were not adjusted for local conditions. We found that in order to accomplish the requisite number of inspections, inspection items located in remote areas, items with large numbers of wells and production facilities, and items with significant production volumes were inspected less frequently than nearby items, items with one or two wells, items grouped in a single location, or low producing items.

B. INACTIVE WELLS

The Bureau did not ensure that inactive wells were properly classified, justified, and approved or that bonds were sufficient to protect the Government in case a lease operator defaulted. Furthermore, the Bureau routinely approved lease assignments without determining whether bond amounts were adequate to fund well-plugging and site restoration costs. The Code of Federal Regulations requires that: (1) oil and gas wells be plugged promptly and abandoned when they are no longer capable of producing in paying quantities unless approval is provided for an alternate use (43 CFR 3162.3-4) and (2) bonds be submitted in amounts necessary to ensure the complete and timely plugging of wells and reclamation and restoration of the lease area. However, requirements were not met because: (1) management had not ensured that field offices had sufficient staff to comply with procedures for reviewing inactive wells and (2) the Bureau had not provided guidance for measuring the sufficiency of bonds or had not increased minimum bonding requirements since 1960. As a result, the Government was not adequately protected if operators defaulted on these wells. Since fiscal year 1991, the Government has paid \$1.6 million to plug 131 orphan wells and has identified a liability of \$3 million for plugging an additional 300 wells.

Status of Wells

Although the Bureau has made some progress in addressing the status of inactive wells since our review in fiscal year 1989, we found that the Bureau had not ensured that inactive wells were properly classified, justified, and approved. The Code of Federal Regulations (43 CFR 3162.3) states that when a well is “no longer capable of producing in paying quantities,” it will be promptly plugged and abandoned unless the Bureau’s authorized officer approves the use of the well for other purposes. The Code further states that no well may be temporarily abandoned for more than 30 days without the prior approval of the authorized officer. The operator classifies well status on the monthly report of operations and is required by Bureau Instruction Memorandum 92-149, dated March 6, 1992, to justify all wells in inactive status, such as shut-in or temporarily abandoned wells. The memorandum further requires the Bureau’s authorized officer to then approve the status based on justification provided by the operator.

Program Accomplishments. Our 1989 audit of the Bureau’s Inspection and Enforcement Program concluded that the Government was potentially liable for a portion of the costs of plugging many of the 22,520 reported inactive wells nationwide on Federal and Indian leases because the Bureau was not ensuring that oil and gas well operators were in compliance with existing operational and environmental regulations and statutes. As a result, the Bureau issued an action plan (Instruction Memorandum 92-149) that, when aggressively implemented, resulted in operators plugging many unneeded wells and in many other wells being classified and approved properly. Bureau Instruction Memorandum 92-149 requires and provides procedures for correctly classifying and approving a well’s status and for increasing individual operator bond minimums. In addition, the Bureau had identified over 400 orphan wells and provided funding of over \$1.6 million to plug 131 of these wells.

Classification and Approval. Proper classification and approval of inactive wells are essential in obtaining operator compliance for prompt plugging and abandonment of wells that are no longer capable of producing oil or gas in economic quantities. Some operators may misreport well status in order to postpone costly well-plugging operations indefinitely. Orphan wells result when wells that are not economical are allowed to accumulate with an operator that does not have the financial resources to cover well-plugging costs. For example, if a large company determines that a particular lease is no longer profitable because of declining production volumes, the large company may sell the lease to a smaller local operator, which can operate the wells on a smaller profit margin. This operator will deplete production well by well until the operator can no longer make a profit. If the smaller operator has not made sufficient money on the wells to pay for plugging and abandonment, the wells will be in a shut-in or abandoned status until the Bureau reviews the status of the wells and requires the wells to be plugged. The operator may then abandon the lease or file bankruptcy, which may obligate the Government to pay for the well plugging and the surface restorations. The Government may be able to collect this operator's \$10,000 lease bond, but the cost to plug the wells could range from \$150,000 to \$200,000. These operators then abandon the leases or file bankruptcy, which changes the responsibility for the plugging and the surface restoration to the Government. To ensure the timely plugging of wells that are not economical, Bureau Instruction Memorandum 92-149 requires that operators formally justify the temporary closure of a well (shut-in) for future use, demonstrate a well's qualification for approval of temporary abandonment, return the well to production, or submit plans to plug the well. Furthermore, the memorandum requires the Bureau to enforce operator compliance with these procedures for all inactive wells by October 1, 1994. Based on our review of the Bureau's progress, we found that:

- At the seven field offices visited, 2,877 (54 percent) of the total 5,284 inactive wells identified as requiring action had not been addressed (Appendix 7),

- At six field offices, only 15 of the 76 approvals for temporary abandonment we reviewed were current and adequately justified. The remaining 61 approvals contained only marginal justifications for approval (25) or had expired or contained no justification (36).

- At four field offices, only 14 of the 40 justifications we reviewed for shut-in status were current and adequately supported. The remaining 26 justification files contained only marginal support (6), had expired or contained no justifications (17), or were misclassified as shut-in wells (3). At the three remaining field offices visited, justifications for well shut-in were not accepted by the Bureau because inactive wells reviewed were all required to have approval for temporary abandonment.

Inactive wells were not properly classified, approved, and justified because the Bureau did not provide the management oversight necessary to ensure that procedures required by the Bureau's Instruction Memorandum 92-149 were implemented. Specifically, the Bureau did not require: (1) assigned staff to meet time frames established in the memorandum or provide additional staff if needed to meet the time frames and (2) operators to submit

adequate justifications for shut-in well status or for approval of temporary abandonment. A Carlsbad Resource Area Office petroleum engineer who approved most of the temporary abandonment requests stated that he approved all requests regardless of the justification if the well passed a casing integrity test.⁶

Implementation of Instruction Memorandum 92-149 varied among field offices. While petroleum engineers were responsible for approving requests for temporary abandonment and for reviewing justifications for shut-in status at all offices visited, responsibilities for identifying inactive wells that required action and for handling the correspondence and communication with the operator to obtain compliance varied. For instance, at the Carlsbad Resource Area Office and the Lea County Inspection Section Office, operator identification, correspondence, and communication on inactive wells were handled by the Inspection and Enforcement staff, at the Buffalo and Platte River Resource Area Offices, these duties were handled primarily by the petroleum engineers. At the seven offices reviewed, staff generally attributed the lack of progress on the well status review to other priorities, such as conducting detailed production accountability inspections on low-producing wells (see Finding A), and on insufficient staffing.

Bonding

Bonds on Federal onshore oil and gas leases were often inadequate to protect the Government in case a lease operator defaulted, especially regarding well-plugging and abandonment obligations. Minimum bond requirements are established at \$10,000 for an individual lease; \$25,000 for all leases in any one state; or \$150,000 to cover all leases nationwide (43 CFR 3104). The Bureau's authorized officer may increase the amount of any bond if the estimated costs for plugging and abandonment exceed the bond amount (43 CFR 3104.5(b)). However, bonding was inadequate because: (1) Bureau management had not increased bond minimums for individual and statewide bonds; (2) field offices did not recommend individual bond increases because they believed that they did not have specific criteria to evaluate and identify at-risk leases and that management would not support their recommendations; and (3) Bureau management did not require an analysis of bond adequacy as a condition of approving lease assignments.

Although the Bureau recognized these deficiencies, it did not address them effectively. The Bureau's current minimum bond levels for oil and gas leases were established in 1960. The March 1995 Bureau report titled "Bonding/Unfunded Liability Review" concluded that protection provided by a \$10,000 individual or a \$25,000 statewide bond in 1960 would, in 1995, require a \$54,000 and a \$135,000 bond, respectively, for the same level of protection. While the report's recommendation to raise bond minimums to \$20,000 for individual bonds and to \$75,000 for statewide bonds would not achieve these levels, the increase would be a significant improvement. In addition, the report's recommendations to plug temporarily abandoned wells on a scheduled basis after 2 years and to either increase the wells' bond levels or charge an annual fee for temporarily abandoned wells

⁶A casing integrity test is a test for detecting well-casing leaks during which a well's casing is pressurized and monitored for decreases in pressure over a fixed period of time.

for the purpose of establishing an orphan well-plugging fund also have merit. However, the Bureau has not accepted or proposed for implementation either recommendation. Although the Bureau has proposed for implementation the report's recommendation to consider the adequacy of bonds before assignments are approved, it has not provided measurable guidelines by which to identify inadequate bonds. Finally, the Bureau required a nationwide review of the adequacy of bonds in Instruction Memorandum 92-149, but this review did not result in a single bond increase in any of the three Bureau state office jurisdictions covered during our review.

Operators with the highest potential for abandoning leases are small operators that hold individual or statewide bonds. These operators are at greater financial risk because they often lease oil and gas wells that have marginal production. These leases often are purchased from large operators that can no longer operate these leases profitably because of declining volumes in production. The Bureau typically approves these lease assignments without ensuring that bonds being provided are adequate to cover well-plugging costs. Typically, larger operators, despite not having sufficient bond coverage, cover the costs of well plugging and abandonment because they have many profitable producing leases under a nationwide bond that they do not want to jeopardize through default.

Because the Bureau has not taken sufficient action to minimize Government liability for the costs of plugging orphan wells, the Government has, since fiscal year 1991, incurred costs of \$1.6 million to plug 131 orphan wells and is liable for plugging over 300 more orphan wells, estimated to cost more than \$3 million. In addition, the Bureau estimates that there are 6,500 wells classified as temporarily abandoned and over 11,000 wells classified as shut-in. Many of these wells will require plugging in the near future, and an unknown number of these wells will likely result in additional Government liability for well-plugging costs.

Finally, producing wells with ruptured casings that have not been repaired or inactive wells that have not been plugged properly may also contaminate groundwater or other resources. Because this often happens below the earth's surface, it is not easily detected, and the source well is often not readily identifiable. New Mexico State Government officials and Bureau inspectors from Hobbs, New Mexico, confirmed widespread contamination of a fresh water aquifer near Hobbs, which is a source of fresh water used for drinking and agricultural purposes in the area. For example, these officials provided us information concerning a Federal lease that contained only shallow water wells (38 to 45 feet) but that has produced over 500,000 barrels of crude oil since the 1960s from the Ogallala Aquifer. Further, these officials said that they believe the oil came from ruptured well casings. However, the specific wells are unknown and could be Federal, state, or private wells. State officials estimated that cleanup of this site would cost about \$2 million.

Recommendations

We recommend that the Director, Bureau of Land Management:

1. Provide more effective use of resources in the Inspection and Enforcement Program, including the use of inspectors to assist in ensuring that all inactive wells are reviewed annually.

2. Ensure that operators submit sufficient documented justification annually for all temporarily abandoned or shut-in wells and require that those wells not justified be plugged or returned to production.

3. Implement the recommendation in the Bureau's March 1995 report to increase bond minimums from \$10,000 to \$20,000 on individual bonds and from \$25,000 to \$75,000 on statewide bonds.

4. implement the recommendation in the Bureau's March 1995 report to require operators that have approved temporarily abandoned wells after 2 years to plug the wells on a schedule acceptable to the field office. Also, for each temporally abandoned well, the bond in place should be increased by \$2 per foot of well depth or a \$100 annual fee should be paid into a Bureauwide orphan well-plugging fund.

5. Develop additional guidelines for reviewing the adequacy of bonds for operators that have the minimum individual lease and statewide bonds. These new guidelines should also establish measurable criteria for increasing bond amounts above the established minimums.

6. Require that bond adequacy be analyzed and, if necessary, increased before lease assignments are approved.

Bureau of Land Management Response and Office of Inspector General Reply

In the June 7, 1996, response (Appendix 8) from the Director, Bureau of Land Management, to the draft report, the Bureau concurred with Recommendations 1-6. Based on the response, we consider the recommendations resolved but not implemented (see Appendix 9).

OTHER MATTERS

At the beginning of our audit, personnel with the Minerals Management Service expressed concern that the Bureau of Land Management routinely reported insignificant discrepancies in production to the Service. However, the Service does not require operators to submit amended Monthly Reports of Operations for these discrepancies. To be cost effective, the Service established a policy of not pursuing discrepancies in overreported production and has established minimum production thresholds for pursuing discrepancies in underreported production. However, the Bureau policy established in Instruction Memorandum No. 93-237, Change 1, issued on July 13, 1994, requires all production reporting discrepancies detected during inspections to be forwarded to the Service regardless of their significance. This memorandum states that the Service had requested that only those amended reports for volume differences greater than the Service minimum production thresholds for pursuing discrepancies per inspection item per month be submitted to the Service for processing. In addition, the Bureau was aware of the Service's general policy of not pursuing the correction of overreported production. This conflict in policies has caused additional work for Bureau resources to develop these production reporting discrepancies and to handle correspondence to the Service. We believe that the Bureau should coordinate with the Service to resolve this issue.

CLASSIFICATION OF MONETARY AMOUNTS

<u>Finding Area</u>	<u>Funds To Be Put To Better Use</u>
Inactive Wells	\$1,600,000

**BUREAU OF LAND MANAGEMENT
OFFICES VISITED OR CONTACTED DURING AUDIT**

<u>Offices</u>	<u>Location</u>
Washington Headquarters*	Washington, D.C.
Colorado State Office* *	Denver, Colorado
White River Resource Area Office	Meeker, Colorado
Montana State Office*	Billings, Montana
Dickinson District Office* *	Dickinson, North Dakota
New Mexico State Office*	Santa Fe, New Mexico
Farmington District Office	Farmington, New Mexico
Roswell District Office**	Roswell, New Mexico
Carlsbad Resource Area Office	Carlsbad, New Mexico
Lea County Inspection Section Office	Hobbs, New Mexico
Roswell Resource Area Office	Roswell, New Mexico
Tulsa District Office**	Tulsa, Oklahoma
Wyoming State Office**	Cheyenne, Wyoming
Casper District Office*	Casper, Wyoming
Buffalo Resource Area Office	Buffalo, Wyoming
Platte River Resource Area Office	Mills, Wyoming

*Contacted by telephone only.

**Visited during survey only.

**DETAILED PRODUCTION ACCOUNTABILITY INSPECTIONS
PERFORMED ON LOW-PRODUCING INSPECTION ITEMS
DURING FISCAL YEAR 1994**

<u>State Offices</u>	Total Inspections Performed	<u>Monthly Production Levels*</u>			
		<u>None</u>	<u>100 Units or Fewer</u>	<u>500 Units or Fewer</u>	<u>1,000 Units or Fewer</u>
Alaska State Office	3	0	0	0	0
California State Office	80	0	4	19	28
Colorado State Office	310	11	64	159	208
Eastern States Office	62	4	17	34	47
Montana State Office	229	0	89	141	170
New Mexico State Office	308	12	83	196	242
Nevada State Office	**	0	0	4	5
Utah State Office	119	1	5	35	54
Wyoming State Office	<u>371</u>	<u>18</u>	<u>46</u>	<u>114</u>	<u>154</u>
Total	<u>1,482</u>	<u>46</u>	<u>308</u>	<u>702</u>	<u>908</u>

*For reporting purposes, we defined a unit as a fixed amount of oil and gas totaling 1 barrel of oil, 10 mcf of gas, or any combination of the two with the same aggregate volume.

**The total number of inspections performed in Nevada was not provided by the Bureau.

**PERFORMANCE OF REQUIRED HIGH PRIORITY DRILLING AND
PLUGGING AND ABANDONMENT INSPECTIONS
DURING FISCAL YEAR 1994**

<u>State Offices and Inspection Offices</u>	<u>Drilling</u>			<u>Plugging and Abandonment</u>		
	<u>Inspections Required</u>	<u>Inspections Performed</u>	<u>Inspections Not Performed</u>	<u>Inspections Required</u>	<u>Inspections Performed</u>	<u>Inspections Not Performed</u>
Colorado State Office						
White River Resource Area Office	68	68	0	67	65	2
New Mexico State Office						
Carlsbad Resource Area Office	183	73	110	64	64	0
Lea County Inspection Section Office	169	36	133	127	43	84
Roswell Resource Area Office	0	0	0	2	2	0
Farmington District Office	12	12	0	196	196	0
Wyoming State Office						
Buffalo Resource Area Office	27	24	3	21	5	16
Platte River Resource Area Office	<u>41</u>	<u>41</u>	<u>0</u>	<u>200</u>	<u>85</u>	<u>115</u>
Total	<u>500</u>	<u>254</u>	<u>246</u>	<u>677</u>	<u>460</u>	<u>217</u>

OIL AND GAS PRODUCTION ACCOUNTABILITY PILOT

During fiscal year 1993, the New Mexico State Office and the Farmington and Tulsa District Offices initiated the Oil and Gas Production Accountability Pilot for detecting volume discrepancies reported on the Monthly Reports of Operations. Inspectors and managers in these offices said that they believed the Inspection and Enforcement strategy placed too much emphasis on labor-intensive, detailed production accountability inspections and that a new approach might provide more effective detection of misreporting of production. The Pilot involved developing detailed procedures for reviewing production records, which included guidance for identifying possible operator misreporting of oil and gas production quantities.

To implement the Pilot, the Farmington District Office redesignated four of its inspectors as production accountability specialists. A primary responsibility of these specialists is to review and compare production records so that misreported production is identified on the Monthly Reports of Operations. Detailed written procedures, which were developed by the Farmington District Office and implemented in March 1995, require that Monthly Reports of Operations be reviewed initially to identify any reporting anomalies which may warrant further review. These procedures provide guidance for identifying anomalies, including instances where the Monthly Reports of Operations showed the following:

- No gas production with some oil or water production from a gas well.
- No oil production with some gas or water production from an oil well.
- No production when 1 or more production days are reported.
- Extreme variations in production levels when the number of days of production remains constant for flowing wells.
- Unusual or extended well shut-in status.
- Witnessing production from a well reported as shut-in.

Specifically, we reviewed six cases of underreported production volume that were detected by the production accountability specialists and verified information with royalty payment records from the Minerals Management Service. We found that four cases resulted in the reporting of almost 3 million mcf of gas production being amended and in additional royalties of almost \$380,000 being billed. The other two cases had not been resolved at the time of our review.

**INCOMPLETE OR INADEQUATE PRODUCTION INSPECTIONS
PERFORMED DURING FISCAL YEAR 1994 AND FIRST QUARTER
OF FISCAL YEAR 1995**

State Offices and Inspection Offices	Production Inspections Reviewed	Incomplete or Inadequate Inspections	Inspection Activity Deficiencies					
			Meter Bypass Not Verified	Measurement Method/Volume Not Verified	Site Security Not Verified	Production Records Not Reviewed	Inspection Not Documented	Total Deficiencies
Colorado State Office								
White River Resource Area Office	14	3	3	1	3	2	2	11
New Mexico State Office								
Carlsbad Resource Area Office	20	15	5	6	12	11	9	43
Lea County Inspection Section Office	12	10	0	3	8	10	8	29
Roswell Resource Area Office	12	9	5	5	8	6	8	32
Farmington District Office	34	17	5	8	8	3	17	41
Wyoming State Office								
Buffalo Resource Area Office	13	5	0	2	3	2	3	10
Platte River Resource Area Office	<u>13</u>	<u>6</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>5</u>	<u>2</u>	<u>11</u>
Total	118	65	19	26	44	39	49	177*

*Sixty-five inspections reviewed were incomplete or inadequate. The difference of 112 results from inspections determined to have multiple deficiencies.

IMPLEMENTATION OF WELL STATUS REVIEW DURING FISCAL YEAR 1995

<u>State Offices and Inspection Offices</u>	<u>Well Status Review Date</u>	<u>Wells Identified for Action</u>	<u>Wells Plugged and Abandoned</u>	<u>Wells Returned to Production</u>	<u>Wells Approved for Temporary Abandonment</u>	<u>Wells Justified for Shut-in</u>	<u>Wells Needing Additional Action</u>
Colorado State Office							
White River Resource Area Office	June 1995	427	133	24	57	56	157
New Mexico State Office							
Carlsbad Resource Area Office	October 1994	1,046	89	79	190	0	688
Lea County Inspection Section Office	October 1994	536	91	65	118	0	262
Roswell Resource Area Office	October 1994	500	4	21	25	0	450
Farmington District Office	March 1995	400	150	90	20	130	10
Wyoming State Office							
Buffalo Resource Area Office	April 1995	781	96	47	15	190	433
Platte River Resource Area Office	April 1995	<u>1,594</u>	<u>340</u>	<u>95</u>	<u>41</u>	<u>241</u>	<u>877</u>
Total		<u>5,284</u>	<u>903</u>	<u>421</u>	<u>466</u>	<u>617</u>	<u>2,877</u>



United States Department of the interior

BUREAU OF LAND MANAGEMENT
Washington, D.C. 20240

In Reply Refer To:
1245 (W0310, W0850)

JUN - 7 1996

Memorandum

To: Assistant Inspector General for Audits,
Through: **For** Bob Armstrong *Piet de Wit*
Assistant Secretary, Land and Minerals Management
From: *Deputy* Director, Bureau of Land Management *Pat McElroy*
Subject: Response to Draft Audit Report on the Inspection and
Enforcement Program and Selected Related Activities,
Bureau of Land Management (Assignment No. C-IN-MOA-005-94 (B))

Thank you for the opportunity to respond to the subject draft audit report. We offer the following comments and responses to the recommendations presented in the report:

We do not concur with the statement made on page 10, beginning with the fourth sentence, which states that the Bureau's field office management believed that the inspection strategy required field offices to dedicate limited staff to low priority drilling/abandonment vs. production inspections. From reading the report, this statement stems from your findings that field offices are not conducting high priority drilling and abandonment inspections. The strategy document is very clear that high priority drilling and abandonment inspections are to take precedence over production inspections.

We do not concur with the statement made on page 12, first paragraph, last sentence, that states "We believe that production accountability could have been adequately ensured with the less labor-intensive, independent measurement/handling inspections, which require an average of only 6 staff hours to complete." The current independent measurement/handling inspection process will not provide the level of production accountability to meet the intent of the inspection strategy. It was designed as a spot-check of activities ongoing in the field to determine where problem areas may be. It appears that the method used to measure the effectiveness of the detailed production accountability inspection centered around whether or not it resulted in volume discrepancy. The purpose of the detailed production accountability inspection is to determine not only if the production is properly reported, but also if operations in the field are in compliance and if equipment is installed and operating properly.

In May 1995, a team consisting of the Bureau of Land Management's Washington and State Office representatives met in Denver, Colorado, to look at on-the-ground issues relating to the Inspection and Enforcement (I&E) Program. The team developed a revised independent measurement/handling inspection process that would be used to determine if a detailed production accountability inspection was required. The new process would require a more in-depth review of field operations and production records, although not to the extent required under a detailed production accountability inspection. However, the time required to complete the revised independent measurement/handling inspection will increase.

We do not concur with the statement on page 13, paragraph beginning with "Local Conditions," that indicated that the BLM's I&E Strategy does not take local field office conditions, such as weather, topography, and resources, into account. When a field office develops its inspection plan matrix, consideration is given to these conditions through the amount of time necessary to complete the inspection. Field offices are required to document in the Automated Inspection Record System the amount of inspection time, office time, and travel time it took to complete an inspection. This information is then used in preparing the inspection plan matrix. In addition, during times when weather conditions do not allow personnel to travel to conduct inspections, the I&E staff perform the records review portion of inspections, and conduct file research of future inspections.

Our responses to the following recommendations follow:

A. Inspection and Enforcement

Recommendations 1 and 2

(1) Reevaluate and revise the Inspection and Enforcement strategy to use Inspection and Enforcement Program resources more effectively and efficiently. Specifically, field offices should determine the mix of detailed production accountability inspections and independent measurement/handling inspections to be performed based on the offices' Program needs and priorities.

(2) Establish a minimum production level threshold below which detailed production accountability inspections are not required unless warranted by documented conditions.

Response: We support reevaluating the I&E Strategy to use program resources more effectively and efficiently and to establish minimum production levels below which a detailed production accountability inspection will not be performed (Recommendations 1 and 2).

We agree that a national minimum production level threshold would eliminate unnecessary inspection of marginal wells. The Oil and Gas I&E Policy/Guidance Team that met in Denver, Colorado, in May 1995, proposed changes to enhance the requirements of the independent measurement/handling inspections and to eliminate percentage requirements for conducting inspections. These changes were sent to the field in draft in August 1995. Field

offices were given the option of implementing the draft policy or continue under the fiscal year (FY) 1995 requirements for FY 1996. At the end of FY 1996, we will evaluate the results of these inspections, then determine if additional changes need to be made to the process.

Recommendation 3

Use existing I&E Program resources to ensure that all priority well-drilling and -plugging operations are inspected.

Response: We concur that existing I&E Program resources are to be used to ensure that all high priority drilling and plugging operations are inspected. The I&E Strategy is very clear on this matter. High priority drilling and abandonment inspections are to take precedence over production inspections. The BLM Washington Office will issue an Information Bulletin by August 30, 1996, to the field that presents the importance of conducting these inspections.

Recommendation 4

Develop detailed procedures for inspectors to use in reviewing production records and provide training necessary to implement these procedures. These procedures should specify the minimum number of monthly production records to be reviewed both for standard production reviews and for reporting anomalies that are detected.

Response: We concur that there is a lack of detailed procedures for production record reviews and training. The review process of production records has been a learning process for all offices. Our field offices have developed in-house procedures and guidance for production record reviews. We will incorporate the various versions of these procedures into one document by December 31, 1996. We are also looking at the possibilities of using distance learning to train our personnel.

Recommendation 5

Develop requirements to ensure that the results of inspections and the independent supervisory or peer reviews are recorded and documented.

Response: We concur that there is a need for inspection documentation requirements. The BLM Washington Office circulated for field comment draft instructions titled Clarification of Oil and Gas Inspection Documentation. We are in the process of reviewing and developing additional procedures based on the comments and plan to issue the final procedures by October 1, 1996.

B. Inactive Wells

Recommendation 1

Provide more effective use of resources in the Inspection and Enforcement Program, including the use of inspectors to assist in ensuring that all inactive wells are reviewed annually.

Response: The BLM Instruction Memorandum (IM) No. 92-149 requires “. . . an ongoing review of all SI/TA wells every 12 months.” The 1997 I&E Strategy will encourage the more effective use of inspectors, for both office record review and on-site inspections, in ensuring that this mandate is met.

Recommendations 2, 5 and 6

(2) Ensure that operators submit sufficient documented justification annually for all temporarily abandoned or shut-in wells and require that those wells not justified be plugged or returned to production.

(5) Develop additional guidelines for reviewing the adequacy of bonds for operators who have the minimum lease and statewide bonds. These new guidelines should also establish measurable criteria for increasing bonds amounts above the established minimums.

(6) Require that bond adequacy be analyzed and increased, if necessary, before lease assignments are approved.

Response: The BLM will re-issue, by August 30, 1996, the requirements contained in IM No. 92-149 that field offices are to heed for the review of inactive wells and lease bonds (Recommendation 2). Also, by August 30, additional guidelines will be issued regarding the review of all oil and gas bonds (Recommendation 5) including the requirement that bond adequacy be analyzed before lease assignments are approved (Recommendation 6).

Recommendations 3 and 4

(3) Implement the recommendation in the Bureau's March 1995 report to increase bond minimums from \$10,000 to \$20,000 on individual bonds and from \$25,000 to \$75,000 on statewide bonds.

(4) Implement the recommendation in the Bureau's March 1995 report to require operators that have approved temporarily abandoned wells after 2 years to plug the wells on a schedule acceptable to the field office. Also, the bond in place should be increased by \$2 per foot of well depth or a \$100 annual fee should be paid into a Bureauwide orphan well-plugging fund for each temporarily abandoned well.

Response: The BLM agrees in principle on raising the minimum bond amounts on both individual and statewide bonds (Recommendation 3) and after two years to require operators who have approved abandoned wells to plug the wells on a schedule acceptable to the field office (Recommendation 4). Also, the BLM supports the recommendation that the bond in place be increased for each temporarily abandoned well (Recommendation 4). However, the BLM has not yet had the opportunity to decide on the specific amounts for the increases. The BLM will start a review of the appropriateness of the specific bond amounts as recommended by the BLM's Bonding/Unfunded Liability Review Team. We will complete the necessary changes in regulations to raise the minimum bond and issue guidance for increasing the bond amount for temporarily abandoned wells by September 30, 1997.

The Responsible Official for the implementation of all recommendations is Herd Tipton, Assistant Director, Resource Use and Protection.

The point of contact for the I&E Program is Lenny Bagley, Montana State Office (MT-920), 406-255-2847 and for inactive Wells is Rudy Baier, Fluids Group (WO-310), 202-452-5024. For general information, contact the BLM's Audit Liaison Officer, Gwen Midgette, 202-452-7739.

STATUS OF AUDIT REPORT RECOMMENDATIONS

Finding/Recommendation Reference	Status	Action Required
A.1-A.5 and B.1-B.6	Resolved; not Implemented	No further response to the Office of Inspector General is required. The recommendations will be referred to the Assistant Secretary for Policy, Management and Budget for tracking of implementation.

**ILLEGAL OR WASTEFUL ACTIVITIES
SHOULD BE REPORTED TO
THE OFFICE OF INSPECTOR GENERAL BY:**

Sending written documents to:

Calling:

Within the Continental United States

**U.S. Department of the Interior
Office of Inspector General
1550 Wilson Boulevard
Suite 402
Arlington, Virginia 22210**

**Our 24-hour
Telephone HOTLINE
1-800-424-5081 or
(703) 235-9399**

**TDD for hearing impaired
(703) 235-9403 or
1-800-354-0996**

Outside the Continental United States

Caribbean Region

**U.S. Department of the Interior
Office of Inspector General
Eastern Division - Investigations
1550 Wilson Boulevard
Suite 410
Arlington, Virginia 22209**

(703) 235-9221

North Pacific Region

**U.S. Department of the Interior
Office of Inspector General
North Pacific Region
238 Archbishop F.C. Flores Street
Suite 807, PDN Building
Agana, Guam 96910**

**(700) 550-7279 or
COMM 9-011-671-472-7279**

Toll Free Numbers:

1-800-424-5081

TDD 1-800-354-0996

FTS/Commercial Numbers:

(703) 235-9399

TDD (703) 235-9403

HOTLINE

1550 Wilson Boulevard

Suite 402

Arlington, Virginia 22210

